

(b) a motor connected to said wheel for rotating said wheel in said planar reference surface so as to move said dichroic beamsplitters into and out of said common optical pathway.

3. The beamsplitter changer of claim 2, wherein said wheel comprises a sheet of material have a plurality of apertures therethrough for receiving a respective one said dichroic beamsplitters.

4. The beamsplitter changer of claim 3, wherein said wheel is circular.

5. The beamsplitter changer of claim 2, wherein the angle between said common optical pathway and said reference surface is substantially about 45 degrees.

6. The beamsplitter changer of claim 2, wherein said motor is adapted to rotate said mirror holder a selected angular amount.

7. The beamsplitter changer of claim 2, further comprising a plurality of said dichroic beamsplitters supported by said wheel, said dichroic beamsplitters, when moved into said common optical pathway by said motor, splitting said common optical pathway into a first alternative pathway and a second alternative pathway depending on the wavelength of light propagating along said common optical pathway.

8. The beamsplitter changer of claim 7, wherein the angle between said common optical pathway and said reference surface is substantially about 45 degrees.

9. The beamsplitter changer of claim 7, further comprising a light source disposed so as to propagate light along said first alternative optical pathway toward said beamsplitter changer, said light source producing a first wavelength of light selected to excite fluorescence

emission from a sample of material placed in said common optical pathway, said dichroic beamsplitters reflecting said first wavelength of light while passing respective emission wavelengths of light along said second alternative pathway.

10. A method for selecting a dichroic beamsplitter for splitting a common optical pathway into two distinct optical pathways based on wavelength, said method comprising the steps of:

- (a) providing in a planar array a plurality of dichroic beamsplitters having respectively distinct light transmission characteristics, each said dichroic beamsplitter having a reflective surface substantially parallel to said planar array;
- (b) placing said planar array in the common optical pathway so that the plane of said planar array is askew thereto; and
- (c) rotating said planar array in the plane thereof so as to position a selected one of said dichroic beamsplitters in said common optical pathway.

11. The method of claim 10, wherein the plane of said planar array is disposed substantially at 45 degrees to the common optical pathway.

12. The method of claim 10, wherein said rotating is continuous so as to position said plurality of dichroic beamsplitters in the common pathway sequentially.

13. The method of claim 10, and further comprising the steps of: